



## MARYLAND Department of Health

### **Public Health Preparedness and Situational Awareness Report: #2019:06**

Reporting for the week ending 02/09/19 (MMWR Week #06)

**February 15, 2019**

#### **CURRENT HOMELAND SECURITY THREAT LEVELS**

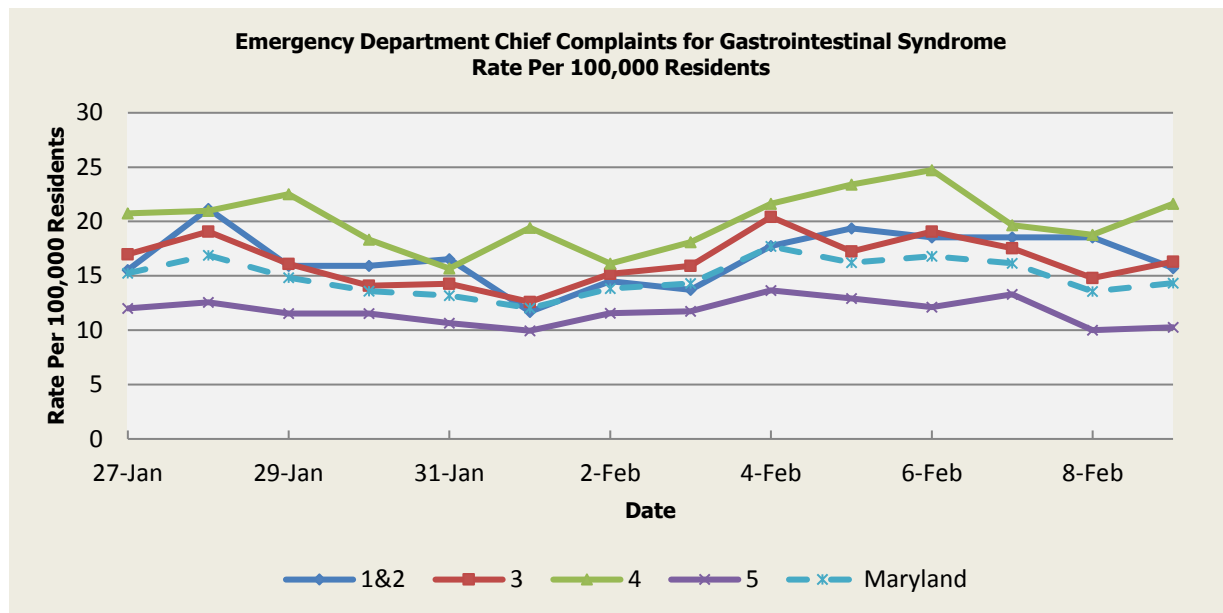
<b>National:</b>	<b>No Active Alerts</b>
<b>Maryland:</b>	<b>Normal (MEMA status)</b>

### **SYNDROMIC SURVEILLANCE REPORTS**

**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):** Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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## Gastrointestinal Syndrome



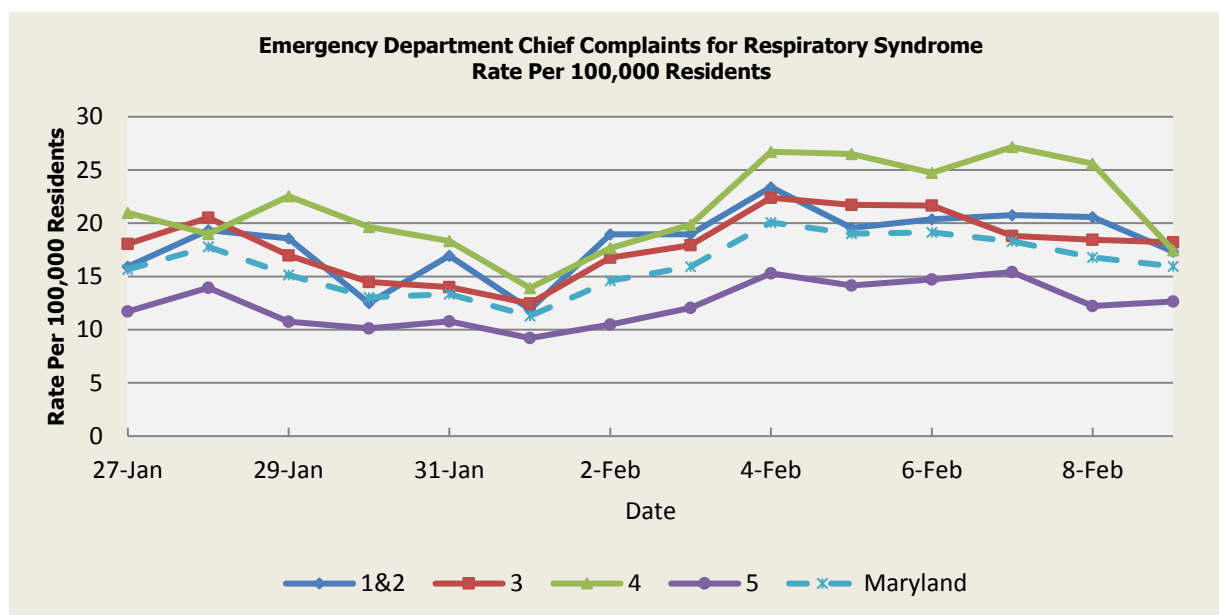
There were four (4) Gastrointestinal Syndrome outbreaks reported this week: two (2) outbreaks of Gastroenteritis in Nursing Homes (Regions 1&2); one (1) outbreak of Gastroenteritis in an Assisted Living Facility (Region 3); one (1) outbreak of Gastroenteritis associated with Schools (Region 3); one (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.11	15.05	15.78	10.16	13.07
Median Rate*	12.91	14.83	15.24	10.04	12.95

\* Per 100,000 Residents

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## Respiratory Syndrome



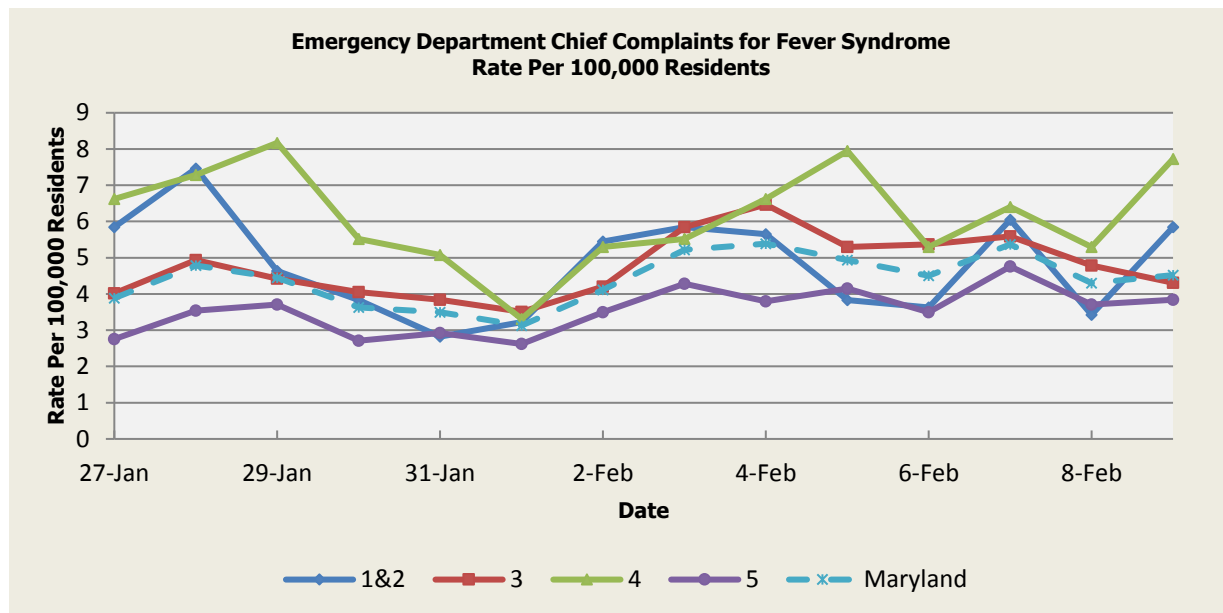
There were eight (8) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Influenza in a Nursing Home (Regions 1&2); one (1) outbreak of Influenza in an Assisted Living Facility (Region 3); three (3) outbreaks of Influenza associated with Schools (Regions 3,4,5); two (2) outbreaks of Influenza associated with Daycare Centers (Regions 3,5); one (1) outbreak of ILI associated with a Daycare Center (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.53	14.64	14.92	9.92	12.67
Median Rate*	12.10	14.07	14.35	9.56	12.20

\* Per 100,000 Residents

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## Fever Syndrome



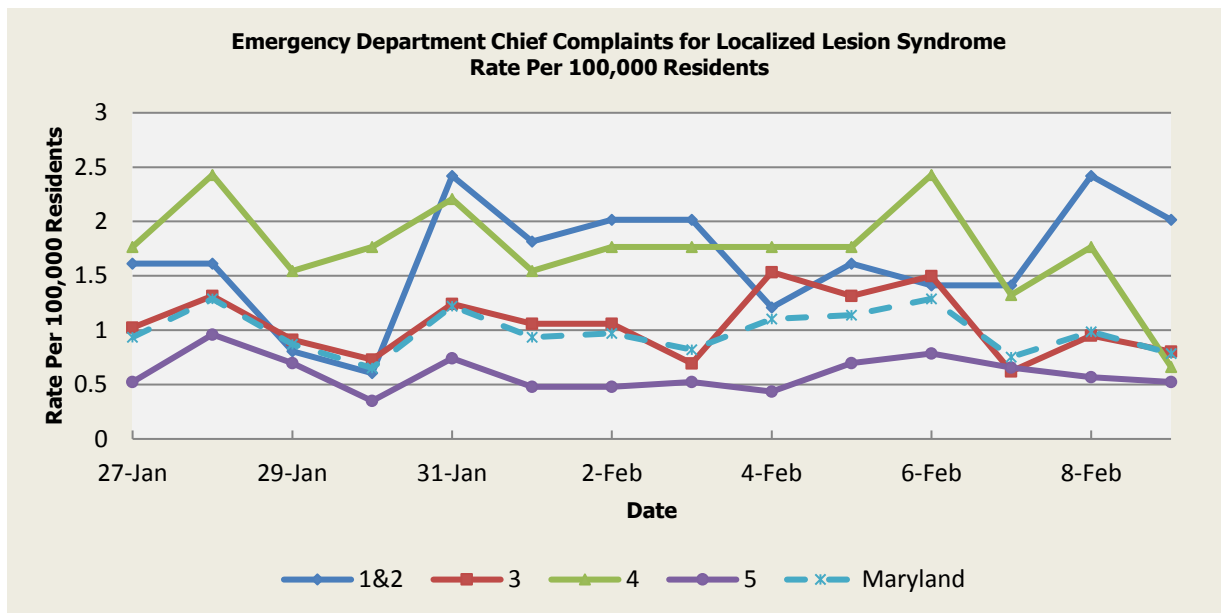
There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.04	3.87	4.05	3.02	3.49
Median Rate*	2.82	3.76	3.97	2.92	3.36

*\*Per 100,000 Residents*

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## Localized Lesion Syndrome



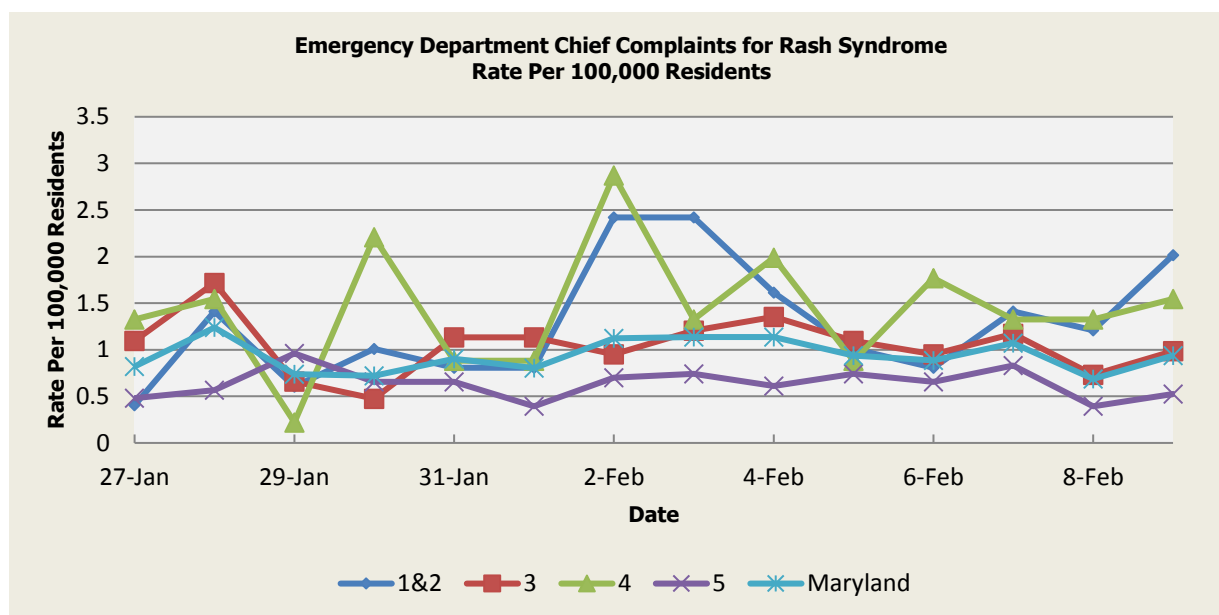
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.09	1.81	2.04	0.92	1.43
Median Rate*	1.01	1.75	1.99	0.87	1.37

\* Per 100,000 Residents

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## Rash Syndrome



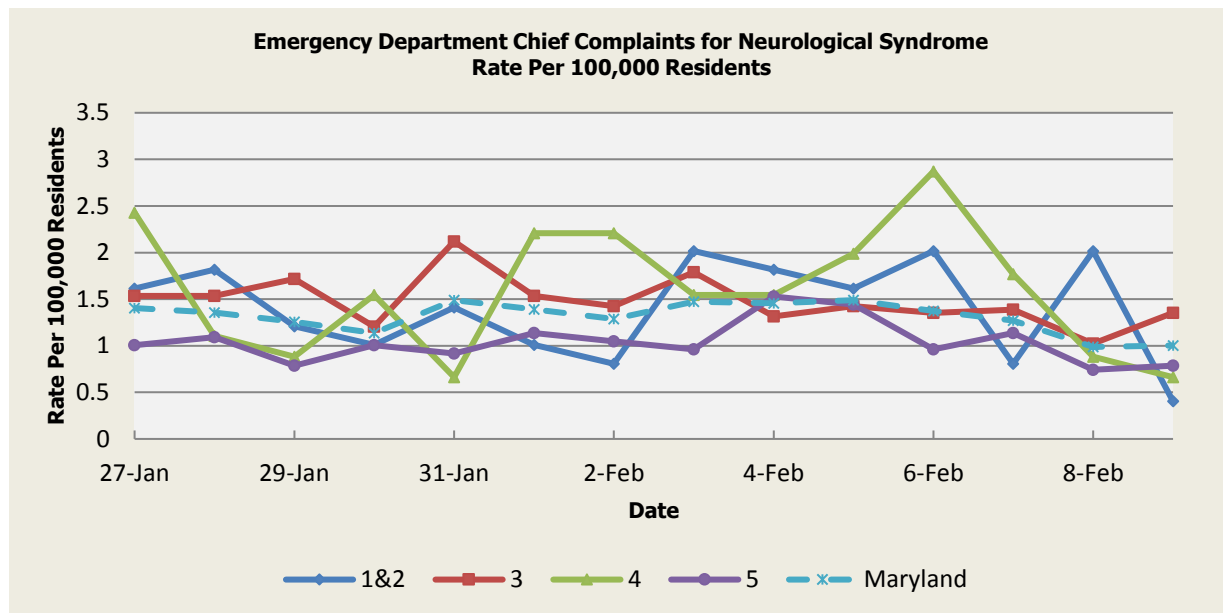
There was one (1) Rash Syndrome outbreaks reported this week: one (1) outbreak of Scabies in a Nursing Home (Region 5).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.69	1.77	0.99	1.39
Median Rate*	1.21	1.61	1.77	0.96	1.34

\* Per 100,000 Residents

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## Neurological Syndrome



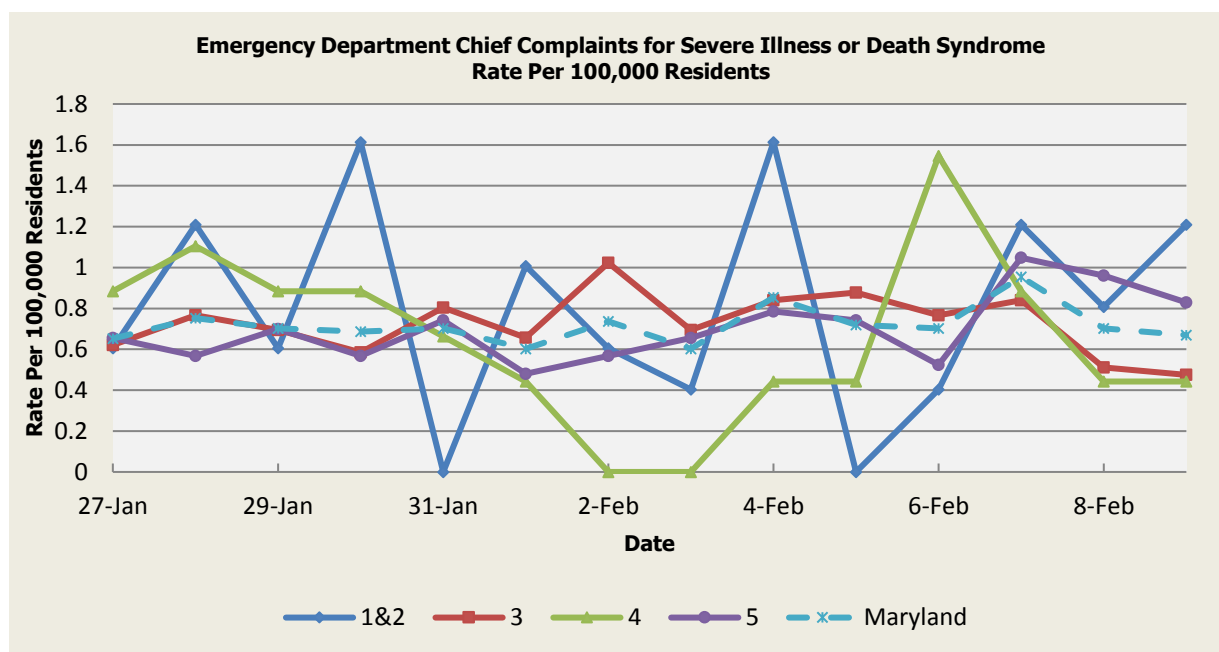
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.75	0.91	0.83	0.57	0.76
Median Rate*	0.60	0.80	0.66	0.52	0.67

\* Per 100,000 Residents

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## Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

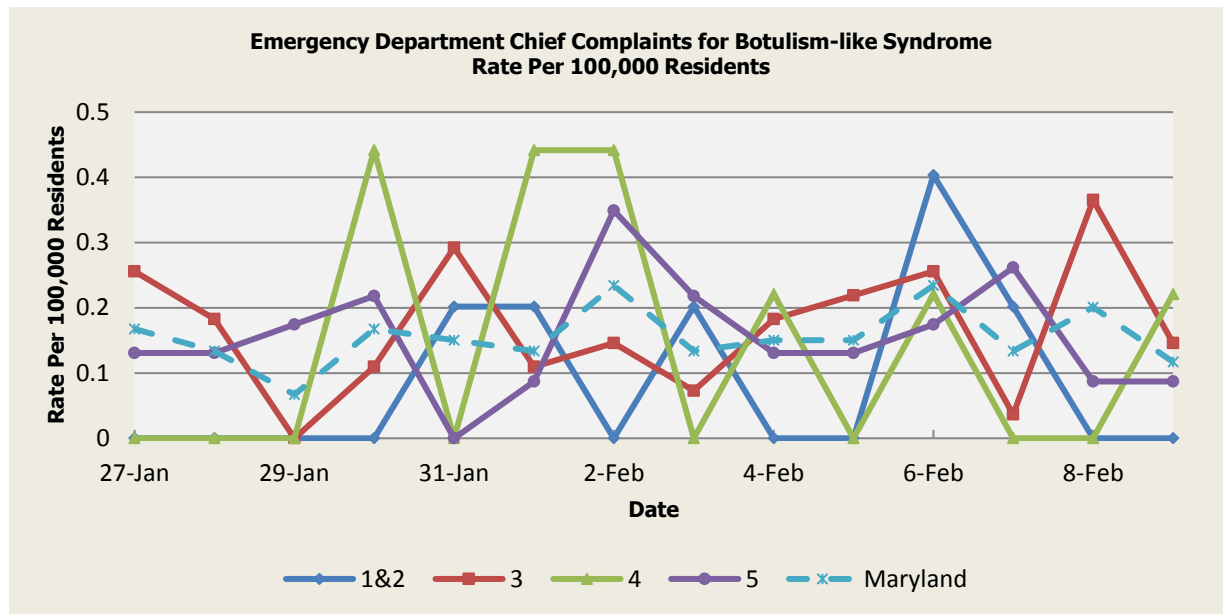
\* Per 100,000 Residents

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## **SYNDROMES RELATED TO CATEGORY A AGENTS**

### **Botulism-like Syndrome**



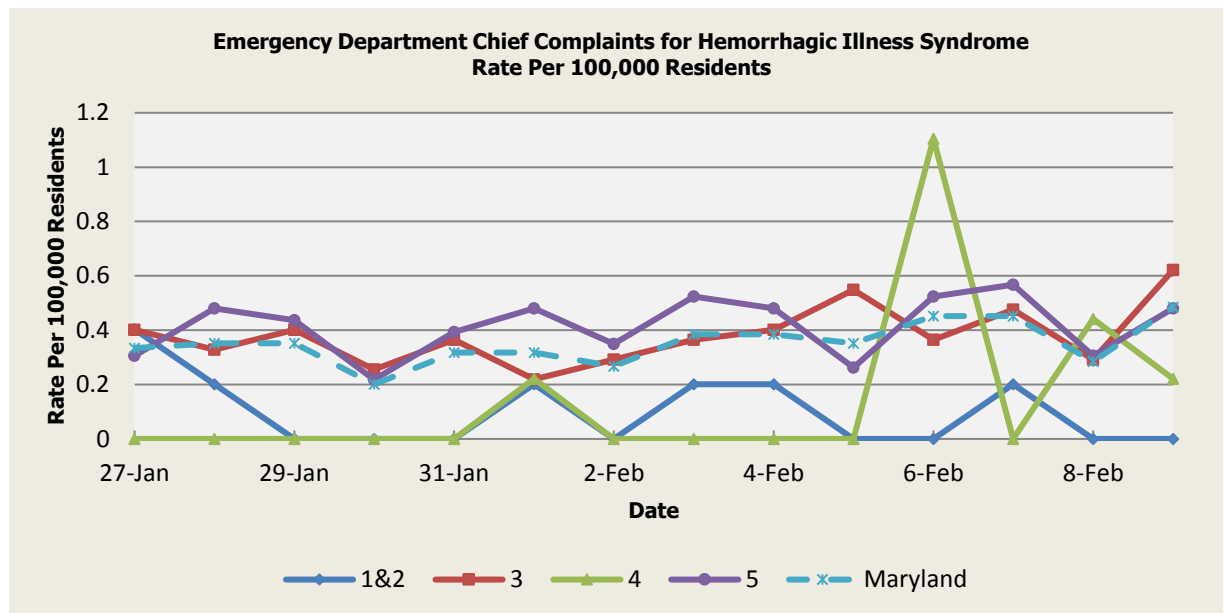
There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 1/27 (Region 3), 1/29 (Region 5), 1/30 (Regions 4,5), 1/31 (Regions 1&2,3), 2/1 (Regions 1&2,4), 2/2 (Regions 4,5), 2/3 (Regions 1&2,5), 2/4 (Region 4), 2/6 (Regions 1&2,3,4,5), 2/7 (Regions 1&2,5), 2/8 (Region 3), 2/9 (Region 4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

\* Per 100,000 Residents

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## Hemorrhagic Illness Syndrome



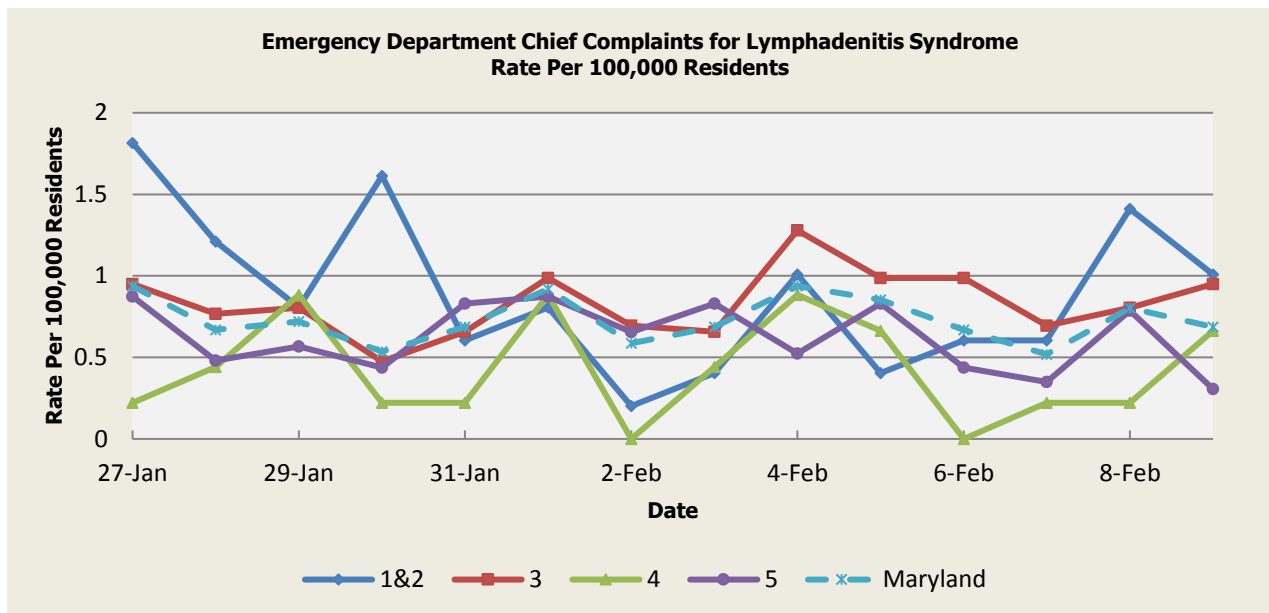
There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 1/27 (Regions 1&2,3,5), 1/28 (Regions 1&2,3,5), 1/29 (Regions 3,5), 1/31 (Regions 3,5), 2/1 (Regions 1&2,4,5), 2/2 (Region 5), 2/3 (Regions 1&2,3,5), 2/4 (Regions 1&2,3,5), 2/5 (Regions 3,5), 2/6 (Regions 3,4,5), 2/7 (Regions 1&2,3,5), 2/8 (Regions 4,5), 2/9 (Regions 3,4,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.15	0.04	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

\* Per 100,000 Residents

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## Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 1/27 (Regions 1&2,5), 1/28 (Regions 1&2), 1/29 (Regions 1&2,4), 1/30 (Regions 1&2), 1/31 (Region 5), 2/1 (Regions 1&2,4,5), 2/3 (Region 5), 2/4 (Regions 1&2,3,4), 2/5 (Region 5), 2/8 (Regions 1&2,5), 2/9 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.35	0.57	0.39	0.36	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.40

\* Per 100,000 Residents

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## **MARYLAND REPORTABLE DISEASE SURVEILLANCE**

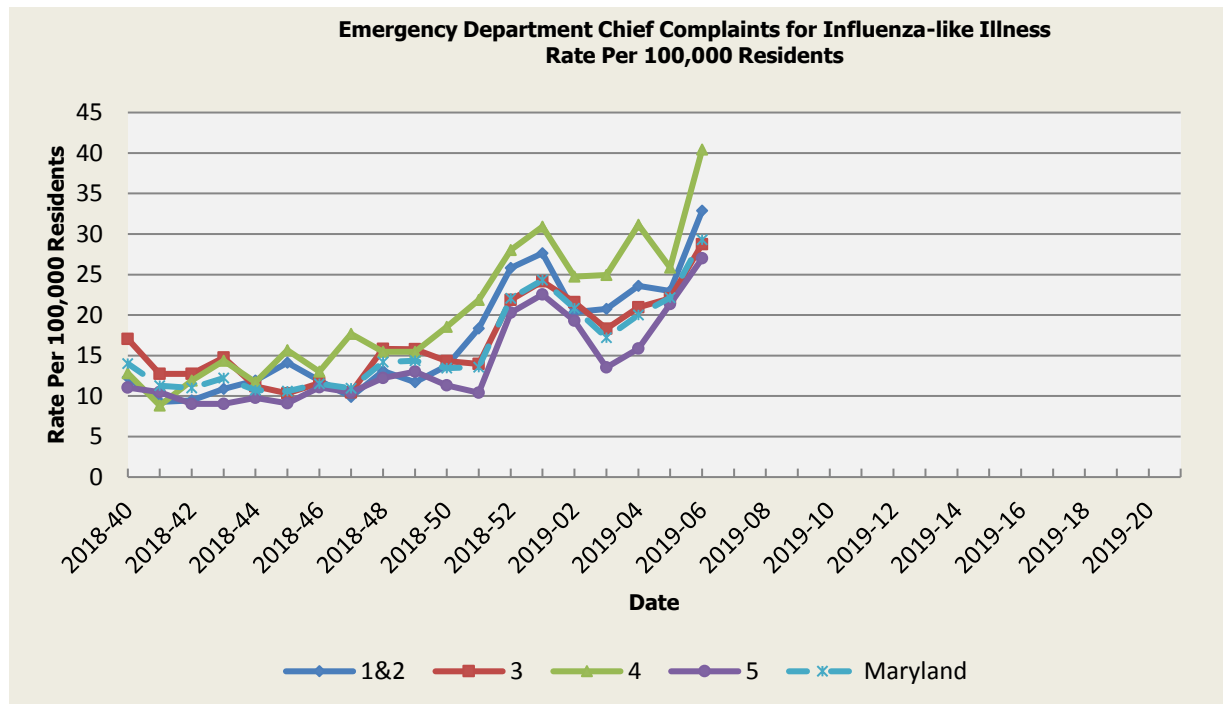
Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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## **SYNDROMIC INFLUENZA SURVEILLANCE**

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 06 was: High Intensity.

### **Influenza-like Illness**

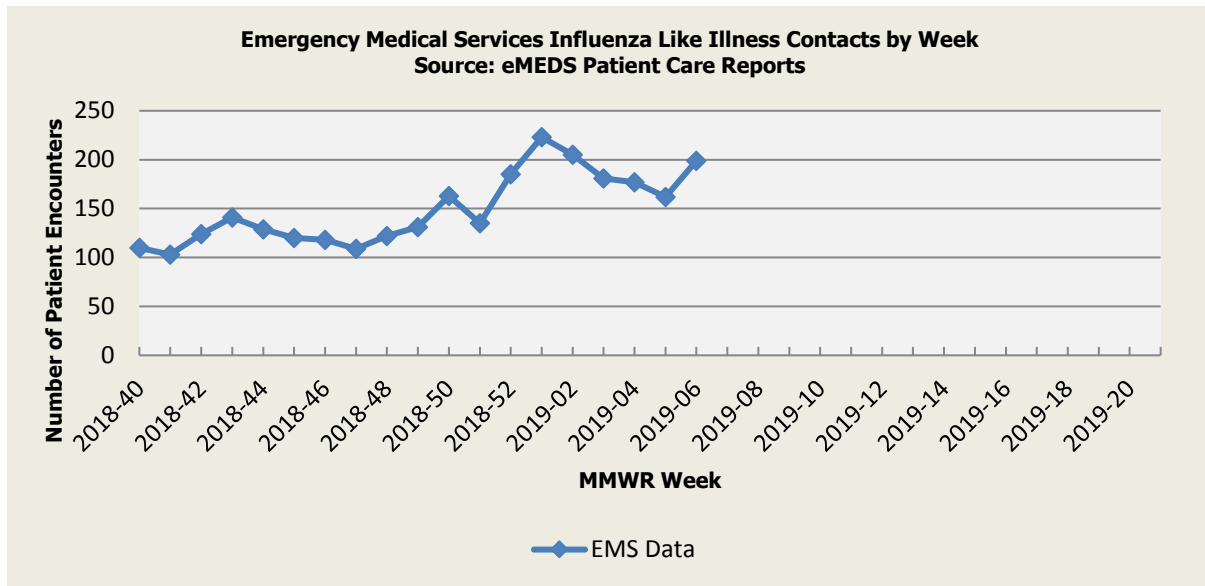


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.83	13.01	12.37	11.03	11.94
Median Rate*	7.66	10.16	9.05	8.56	9.14

\* Per 100,000 Residents

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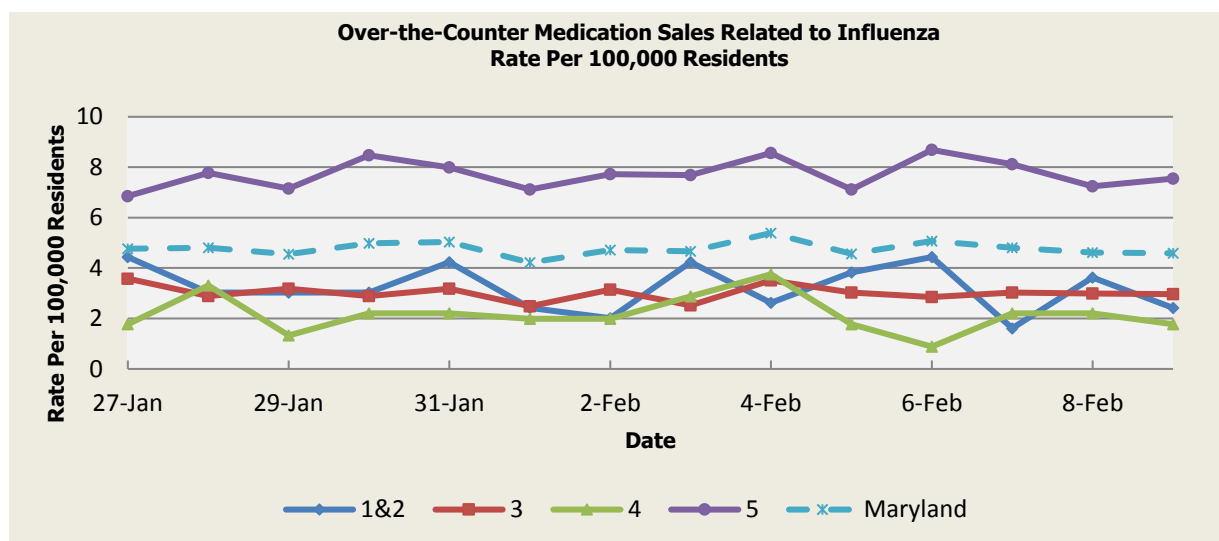
## Influenza-like Illness Contacts by Week



**Disclaimer on eMEDS flu related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has selected “flu like illness” as a primary or secondary impression of a patient’s illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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## Over-the-Counter Influenza-Related Medication Sales



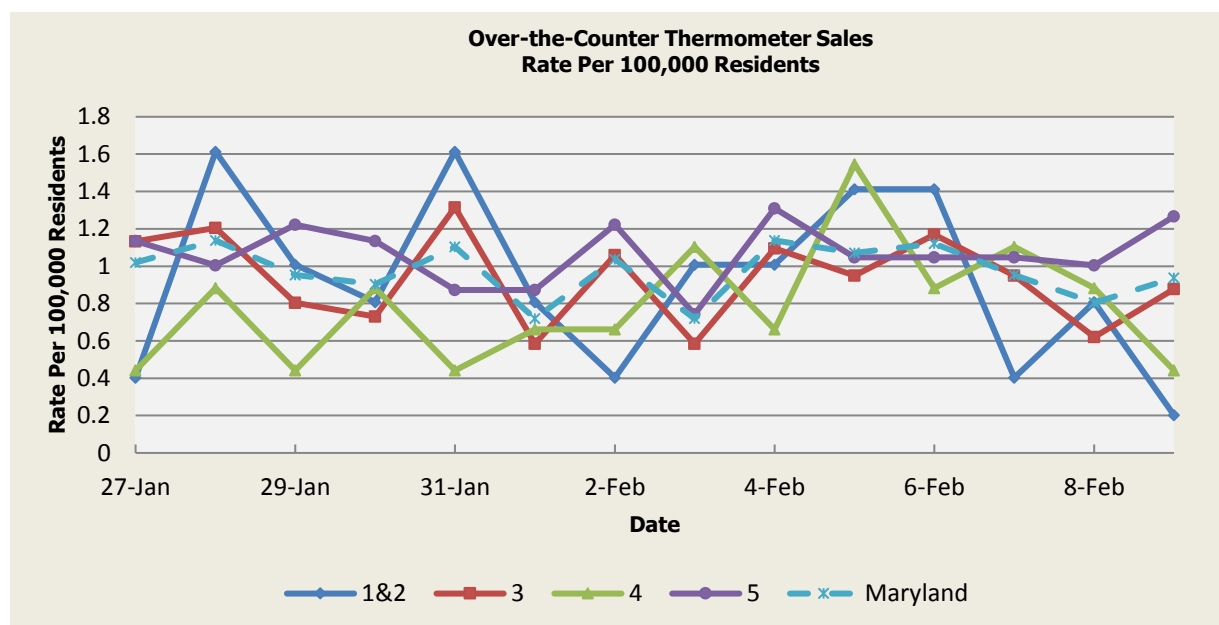
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.62	4.67	2.74	8.09	5.75
Median Rate*	3.02	3.91	2.43	7.47	5.09

\* Per 100,000 Residents

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## Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.11	2.97	2.34	3.94	3.30
Median Rate*	2.82	2.81	2.21	3.75	3.16

\* Per 100,000 Residents

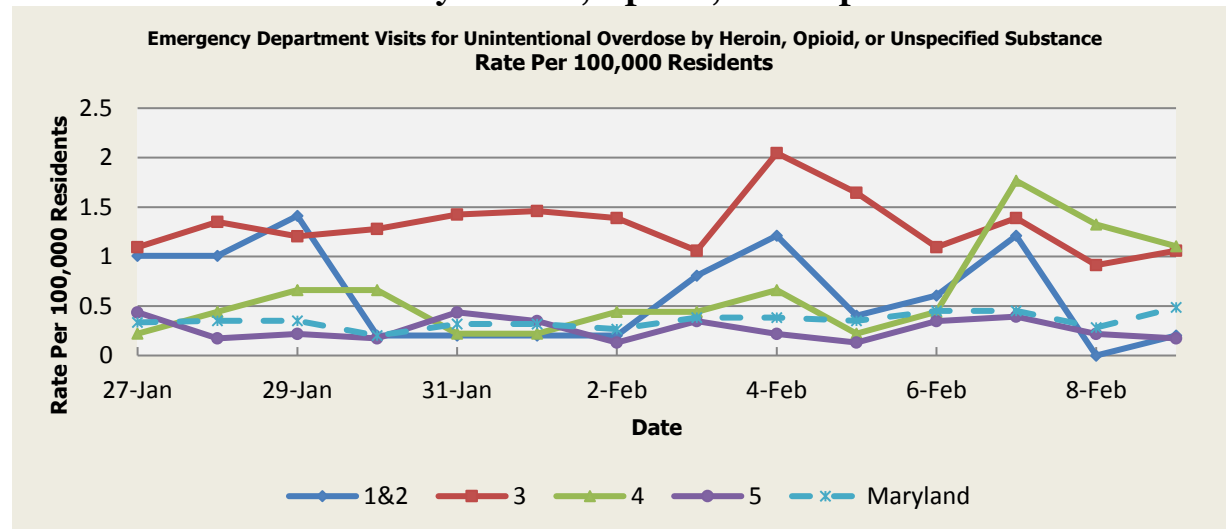
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## **SYNDROMIC OVERDOSE SURVEILLANCE**

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

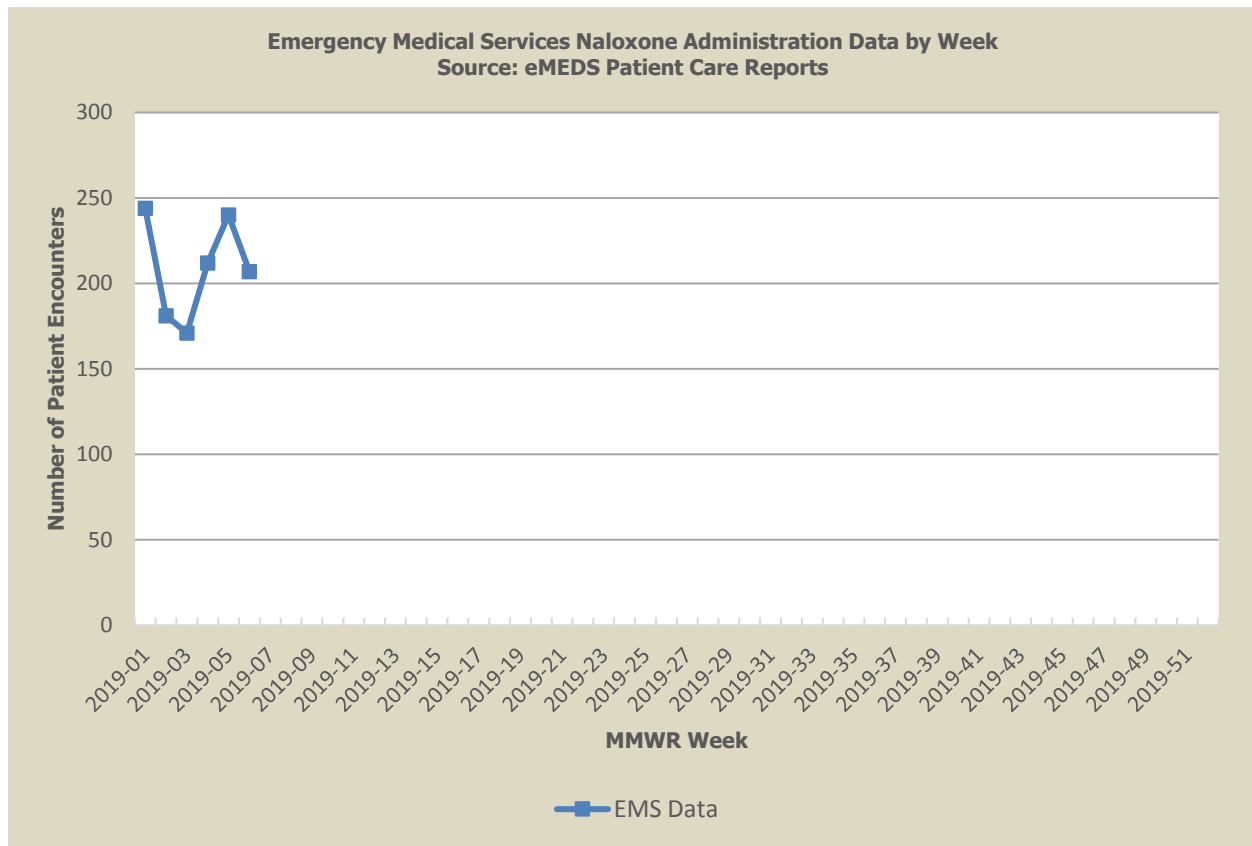
### **Unintentional Overdose by Heroin, Opioid, or Unspecified Substance**



**Disclaimer on ESSENCE Overdose related data:** ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcain, and overdose.

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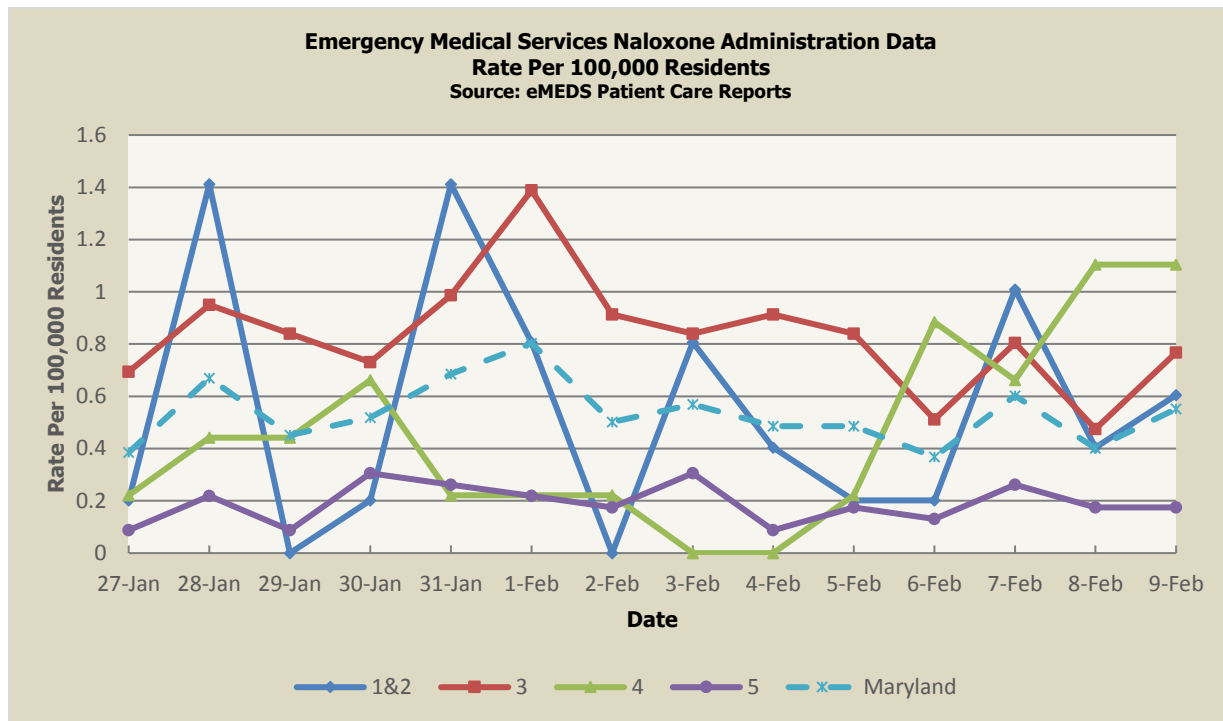
## Naloxone Administration Data by Week



**Disclaimer on eMEDS naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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## Naloxone Administration Data



**Disclaimer on eMEDS Naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of February 14, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

## **AVIAN INFLUENZA**

**AVIAN INFLUENZA (JHARKHAND)**, 12 Feb 2019, The authorities in Bokaro [Jharkhand] are rushing quick response teams to 9 blocks in the district in the wake of bird flu confirmation in Gomia. The state animal husbandry department had on [9 Feb 2019] said samples of dead crows sent to the National Institute of High Security Animal Diseases (NIHSAD), Bhopal, had tested positive for the H5N1 virus that is responsible for the highly infectious scourge in avian species. Read More: <http://www.promedmail.org/post/6311901>

## **HUMAN AVIAN INFLUENZA**

*There were no relevant human avian influenza reports this week.*

## **NATIONAL DISEASE REPORTS**

**RABIES (ALABAMA)**, 10 Feb 2019, Multiple people in Houston County [Alabama] are being treated for potential rabies exposure after a 4-month-old stray puppy was confirmed to have the deadly disease late last month [January 2019], the state Department of Public Health said Thursday [7 Feb 2019]. A number of people were exposed to the pup and have been given standard rabies prevention treatment, the agency said. The stray puppy died. Read More: <http://www.promedmail.org/post/6307760>

**MUMPS (MULTISTATE)**, 10 Feb 2019, With most of the media focused on the ongoing measles outbreaks around the world, another vaccine-preventable, infectious disease has reached 5 [US] states during 2019. As of 6 Feb 2019, the states of Georgia, North Dakota, Pennsylvania, Utah, and Wisconsin have reported mumps cases during 2019. These state-based news reports have yet to be confirmed by the Centers for Disease Control and Prevention (CDC), who has not yet issued a mumps outbreak report for 2019. Read More: <http://www.promedmail.org/post/6307434>

## **INTERNATIONAL DISEASE REPORTS**

**TYPHOID FEVER (PAKISTAN)**, 12 Feb 2019, An outbreak of extensively drug-resistant (XDR) typhoid in Sindh, including Karachi, is rapidly getting out of control, as over a dozen deaths have been reported from different parts of the province due to the bacterium that is resistant to most known antimicrobials. However, Dr Zafar Mehdi of the Sindh Health Department told The News on Wed 6 Feb 2019 that only 4 people -- 3 children and an elderly person -- have died due to XDR typhoid in the province since its outbreak was reported from Hyderabad in November 2016. Read More: <http://www.promedmail.org/post/6313110>

**MERS-COV (SAUDI ARABIA)**, 12 Feb 2019, In the past 24 hours since the last update [11 Feb 2019] there have been 9 newly confirmed infections with the MERS-CoV reported from Saudi Arabia; 1 death and 1 recovery of previously reported cases; and 2 transmission classification changes of previously reported cases. Read More: <http://www.promedmail.org/post/6312350>

**CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN)**, 12 Feb 2019, The city's [Karachi] 1st case in 2019 of Crimean-Congo haemorrhagic fever (CCHF), commonly known as Congo virus, was reported on [Sun 10 Feb 2019] as a woman tested positive for the disease at Jinnah Postgraduate Medical Centre (JPMC). The patient was identified as 35-year-old [TF], resident of Orangi Town. She is currently under treatment at an isolated ward of the JPMC. Read More: <http://www.promedmail.org/post/6311669>

**WEST NILE VIRUS (BRAZIL)**, 08 Feb 2019, The State Health Secretariat of Piauí (SESAPI) confirmed this Friday [8 Feb 2019] the occurrence of another human case of neurological disease in the state caused by West Nile virus. (WNV). The case is a young man resident of the rural zone of Picos, who suffered from acute flaccid muscle paralysis in 2017. The patient was admitted to the University Hospital of the UFPI in Piauí, where the standard protocol for the diagnosis of neuroinvasive diseases issued by SESAPI was applied; he received treatment and recovered completely. The tests were conducted at the time, but the Ministry of Health released the results only in early 2019, indicating the presence of neutralizing antibodies against the virus in the patient's blood. Read More: <http://www.promedmail.org/post/6306915>

**YELLOW FEVER (BRAZIL)**, 08 Feb 2019, A 21-year-old man who had never been vaccinated is the 1st confirmed case of yellow fever in Paraná. This case was identified on Sat 26 Jan 2019, when a task force of the State Secretariat of Health went to the Litoral in order to organize, together with the Antonina municipality, strategies to deal with the disease. The young

man is hospitalized in the Litoral Regional Hospital and is doing well, with a mild form of the disease. Read More: <http://www.promedmail.org/post/6305966>

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

More data and information on influenza can be found on the MDH website:  
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):  
<http://flusurvey.health.maryland.gov>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

### **Prepared By:**

Office of Preparedness and Response, Maryland Department of Health  
300 W. Preston Street, Suite 202, Baltimore, MD 21201  
Fax: 410-333-5000

Kortney Marshall  
Graduate Student Intern  
Office: 410-767-8262  
Email: [Kortney.Marshall@maryland.gov](mailto:Kortney.Marshall@maryland.gov)

Jennifer Stanley, MPH  
Epidemiologist, Biosurveillance Program  
Office: 410-767-2074  
Email: [Jennifer.Staley@Maryland.gov](mailto:Jennifer.Staley@Maryland.gov)

Jessica Goodell, MPH  
Career Epidemiology Field Officer, CDC  
Office: 410-767-6745  
Email: [Jessica.Goodell@maryland.gov](mailto:Jessica.Goodell@maryland.gov)

## Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A



## Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

